



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,332	12/20/2001	John Boakes	367.40946X00	2546

20457 7590 08/12/2003

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

MCCAMEY, ANN M

ART UNIT PAPER NUMBER

2833

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/022,332

Applicant(s)

BOAKES ET AL.

Examiner

Ann M McCamey

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of claims is indefinite because there is an inconsistency between the body and the preamble. The preamble indicates that the electrical connector is being claimed. However, the body contains positive limitations directed toward the card and host device (i.e. "said card" and "said host device;" these limitations lack proper antecedent basis since they are not positively recited) suggesting that applicant intends to claim the combination of the connector and card and/or host device. Applicant is required to clarify what subject matter the claim is intended to be drawn to and the language of the claim must be amended to be consistent with this intent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2833

Claims 1-9, 11, 17-24 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Selvin et al. (US 4,116,517).

Regarding claims 1 and 17, Selvin et al. disclose an electrical connector 10 comprising:

a rigid substrate 12; and

a contact which is supported by said substrate,

wherein said contact is a collapsible, resiliently deformable hollow projection, and

wherein an area between said contact and said rigid substrate is empty to permit said contact to move between a fully collapsed deformed state and a fully extended undeformed state (Column 2, Lines 2-5).

The limitation of "wherein said contact makes electrical connection with a corresponding contact on the electrical mating connector of said card" has not been given weight since it is a recitation of intended use.

The limitation of the volume of the apparatus in a retained state being less than the volume in an unretained state would be inherent due to the collapsible nature of the contact.

Regarding claims 2 and 18, Selvin et al. disclose an exterior surface of the contact being generally convex.

Regarding claims 3 and 19, Selvin et al. disclose the contact being generally dome-shaped.

Regarding claims 4 and 20, Selvin et al. disclose the contact comprising a metal.

Art Unit: 2833

Regarding claims 5 and 21, Selvin et al. disclose the contact comprising an insulating material treated so as to be conductive.

Regarding claims 6 and 22, Selvin et al. disclose the substrate comprising a Printed Circuit Board (PCB).

Regarding claims 7 and 23, Selvin et al. disclose the PCB being flexible.

Regarding claims 8 and 24, Selvin et al. disclose the substrate supporting a conductive track 16 coupled to the contact.

Regarding claim 9, Selvin et al. disclose means 38 for retaining the mating part in contact with connector.

Regarding claim 11 and 27, Selvin et al. disclose the connector comprising a plurality of contacts.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selvin et al.

Regarding claims 10 and 26, Selvin et al. disclose the invention substantially as claimed, but do not disclose using solder to secure the contact on the substrate. The use of solder is well known in the art to mechanically and electrically connect two

Art Unit: 2833

elements. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use solder to secure the contact on the substrate for better mechanical and electrical connection.

Claims 12, 13, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selvin et al. in view of Moore (US 4,050,756).

Selvin et al. disclose the invention substantially as claimed, but do not disclose the substrate supporting a contact on each of two opposing surfaces of the substrate. Moore teaches a substrate with contacts on opposing side of the substrate. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connector of Selvin et al. and have the substrate support contacts on opposing sides to allow for electrical connection on both sides of the substrate thereby minimizing space.

Claims 14-16, 25 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Selvin et al. in view of Applicant's Admitted Prior Art ("A.A.P.A.").

Selvin et al. disclose the invention substantially as claimed but do not disclose the particular use of the connector or a sliding catch. A.A.P.A. teaches the use of connectors with a sliding catch in a SIM/smart card for a portable telephone. It would have been obvious to one having ordinary skill in the art to modify the use of the connector in Selvin et al. as taught by A.A.P.A. based on intended use of the connector

Art Unit: 2833

and include a sliding catch to enable the connector to be secured in the intended apparatus.

Response to Arguments

Applicant's arguments filed 7/18/03 have been fully considered but they are not persuasive. Applicant argues that Selvin et al. fail to anticipate the limitation of collapsible, resiliently deformable hollow projection. Examiner maintains the position that Selvin et al. teach this in column 2, lines 2-5, which states, "[E]ach pad and the area of the insulation sheet underlying the pad is deformed to provide a hollow, upwardly extending contact projection which defines a cavity therebelow." The fact that the pad was deformed to create the projection implies that the pad is, in fact, collapsible and resiliently deformable. Furthermore, since it is more likely the case that Applicant intends to claim only the connector and not the combination of the connector with mating parts, anticipation of the claim only requires that the connector is capable of performing the claimed function. In other words, with sufficient pressure from mating parts, the pads would, in fact collapse and resiliently deform meeting the limitations of the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann M McCamey whose telephone number is (703) 305-3422. The examiner can normally be reached on M-F 9-5:30.

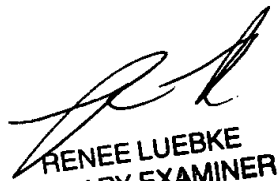
Art Unit: 2833

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

AMM

August 6, 2003



RENEE LUEBKE
PRIMARY EXAMINER